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IS 10068 (Part 4): 1997

### भारतीय मानक

# प्रेस प्रचालन डाई समुच्चय (सादा टाइप)

भाग 4 पश्च पोस्ट आयताकार डाई समुच्चय — विशिष्टि

### Indian Standard

## PRESS WORKING DIE SETS (PLAIN TYPE)

PART 4 REAR POST RECTANGULAR DIE SETS — SPECIFICATION

ICS 25.120.10

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

#### **FOREWORD**

This Indian Standard (Part 4) was adopted by the Bureau of Indian Standards, after the draft finalized by the Metal Forming Machines Sectional Committee had been approved by the Production Engineering Division Council.

The die sets covered in this standard are generally used in Indian industry.

While preparing this standard, assistance has been derived from the data supplied by leading manufacturers and users of the product.

This Standard (Part 4) is one of the parts of the standard on Press working die sets. The other parts of this standard are as follows:

IS 10068 (Part 1): 1982 Press working die sets (plain type): Part 1 Centre post rectangular die sets

IS 10068 (Part 2): 1982 Press working die sets (plain type): Part 2 Centre post square die sets

IS 10068 (Part 3): 1990 Press working die sets (plain type): Part 3 Centre post round die sets

IS 10068 (Part 5): 1996 Press working die sets (plain type): Part 5 Rear post square die sets —

Specification

IS 10068 (Part 6): 1996 Press working die sets (plain type): Part 6 Rear post round die sets —

Specification

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

### Indian standard

## PRESS WORKING DIE SETS (PLAIN TYPE)

#### PART 4 REAR POST RECTANGULAR DIE SETS - SPECIFICATION

#### 1 SCOPE

This standard (Part 4) covers dimensions, material and other requirements for plain type rectangular die sets with two guide posts at the rear.

#### 2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

IS No.	Title					
210:1993	Grey iron castings (fourth revision)					
1030 : 1989	Carbon steel castings for general engineering purposes (fourth revision)					
2062 : 1992	Steel for general structural purposes (fourth revision)					
2102 (Part 1): 1993	General tolerances: Part 1 Tolerances for linear and angular dimensions without individual tolerances indication (third revision)					
7664 : 1979	Guide posts for press tool sets (first revision)					
8127 : 1979	Guide bushes for press tool sets (first revision)					

#### 3 TYPES

The rear post rectangular die sets shall be of the following types:

- a) Type A Without tapped hole for shank, and
- b) Type B With tapped hole for shank.

#### 4 MATERIAL

The top and bottom tool holders shall be of cast iron of grade GG 260 of IS 210: 1993 or cast steel of grade 23-45 of IS 1030: 1989 or mild steel of IS 2062: 1992.

#### 5 DIMENSIONS

The dimensions of rear post rectangular die sets shall be as given in Table 1.

#### **6 GENERAL REQUIREMENTS**

The top and bottom tool holders shall be free from cracks, burrs and pits.

#### 7 DESIGNATION

A rear post rectangular die set shall be designated by:

- a) Its type;
- b) material(C for cast iron, S for cast steel, and M for mild steel);
- c) Die space;
- d) Type of guide post;
- e) Type of guide bush; and
- f) Number of this standard.

#### Example:

A rear post rectangular die set Type A of cast iron having a die space  $a_1 \times b_1 = 100 \text{ mm} \times 80 \text{ mm}$  with guide posts of Type B with round end and having length l = 200 mm and with guide bush of Type B of length l = 50 mm shall be designated as:

Die Set IS 10068 (Part 4) - AC  $100 \times 80$  along with Guide Posts IS 7664 - BR  $25 \times 200$  and Guide Bushes IS 8127 - B  $25 \times 50$ 

#### 8 MARKING

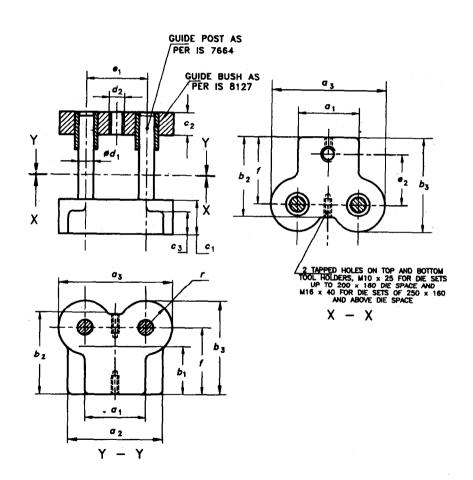
8.1 Each die set shall be marked with its designation and manufacturer's trade-mark at a prominent place on tool holders.

#### 8.2 BIS Certification Marking

The product may also be marked with the Standard Mark.

8.2.1 The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

All dimensions in millimetres.



Die Space $a_1 \times b_1$	$a_2$	a <sub>3</sub>	$b_2$	<i>b</i> <sub>3</sub>	$c_1$	$c_2$	c <sub>3</sub>	$d_1$	$d_2$	$e_1$	$e_2$	f	Г
80 × 63 100 × 63 125 × 63 160 × 63 200 × 63	125 145 170 205 245	150 170 195 236 276	105 105 105 105 105	133 133 133 139 139	45 45 45 50 50	30 30 30 32 32 32	30 30 30 30 30 30	20 20 20 28 25	M20 × 1.5 M20 × 1.5 M20 × 1.5 M20 × 1.5 M20 × 1.5 M20 × 1.5	80 100 125 160 200	66 66 66 70 70	98 98 98 101 101	35 35 35 38 38
100 × 80 125 × 80 160 × 80 200 × 80 200 × 80	145 170 205 245 295	176 201 236 276 326	130 130 130 130 130	156 156 156 156 156	50 50 50 50 50	32 32 32 32 32 32	30 30 30 30 30 30	25 25 25 25 25 25 25	M20 × 1.5 M20 × 1.5 M20 × 1.5 M20 × 1.5 M20 × 1.5 M20 × 1.5	100 125 160 200 250	78 78 78 78 78 78	118 118 118 118 118	38 38 38 38 38
125 × 100 160 × 100 200 × 100 250 × 100 315 × 100	170 205 245 295 360	201 236 286 336 401	150 150 150 150 150	176 176 186 186 186	56 56 56 56 56	40 40 40 40 40	30 30 30 30 30 30	25 25 28 28 28 32	M24 × 1.5 M24 × 1.5 M24 × 1.5 M24 × 1.5 M24 × 1.5	125 160 200 250 315	88 88 93 93 93	138 138 143 143 143	38 38 43 43 43
160 × 125 200 × 125 250 × 125 315 × 125	205 250 300 365	246 286 336 401	180 180 180 180	211 211 211 211	56 56 56 56	40 40 40 40	30 30 30 30	32 32 32 32 32	M24 × 1.5 M24 × 1.5 M24 × 1.5 M24 × 1.5	160 200 250 315	105 105 105 105	168 168 168 168	43 43 43 43
200 × 160 250 × 160 315 × 160 400 × 160	250 300 370 455	286 336 415 500	225 225 225 225 225	246 246 260 260	63 63 63 63	50 50 50 50	30 30 30 30	32 32 40 40	M30 × 2 M30 × 2 M30 × 2 M30 × 2	200 250 315 400	123 123 130 130	168 203 210 210	43 43 50 50
250 × 200 315 × 200 400 × 200 500 × 200	305 370 455 560	350 415 500 600	270 270 270 270 270	300 300 300 300	63 63 63 63	50 50 50 50	30 30 30 30 30	40 40 40 40	M30 × 2 M30 × 2 M30 × 2 M30 × 2	250 315 400 500	150 150 150 150	250 250 250 250 250	50 50 50 50
315 × 250 400 × 250 500 × 250	360 460 560	415 500 600	330 330 330	350 350 350	63 63 63	50 50 50	30 30 30	40 40 40	M30 × 2 M30 × 2 M30 × 2	315 400 500	175 175 175	300 300 300	50 50 50
400 × 315 500 × 315 600 × 400	460 560 560	514 614 614	400 400 490	429 429 614	75 75 75	63 63 63	30 30 30	40 50 50	M42 × 3 M42 × 3 M42 × 3	400 500 500	214 214 257	372 372 457	57 57 57

NOTE — Dimensional deviation for untolerenced dimensions shall be of medium class according to IS 2102 (Part 1): 1993.

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#### **Review of Indian Standards**

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Handbook' and 'Standards Monthly Additions'.

This Indian Standard has been developed from Doc: No. PE 04 (4942).

#### **Amendments Issued Since Publication**

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